APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/829,081	04/10/2001	Kazumasa Toda	NEC01P008-Mi	7418

			EXAMINER
466	7590	06/16/2004	CAO, DIEM K

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ART UNIT	PAPER NUMBER
2126	

DATE MAILED: 06/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/829,081	TODA, KAZUMASA
	Examiner	Art Unit
	Diem K Cao	2126

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _10 April 2001_.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-6_ is/are pending in the application.
  4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) _1-6_ is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  a)☒ All   b)☐ Some * c)☐ None of:
    1.☒ Certified copies of the priority documents have been received.
    2.☐ Certified copies of the priority documents have been received in Application No. _____.
    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).
  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO-SB/08)
  Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-6 are presented for examination.

Priority

2.   Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers

have been placed of record in the file.

Claim Rejections - 35 USC § 112

3.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

4.   Claims 5 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention.

Claims 5 and 6 cite "the system in which said first operating system operates is used as

an input/output processor of the system in which the second operating system operates" which is

unclear. Examiner examining the case as best understood.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6.   Claims 1-6 rejected under 35 U.S.C. 102(e) as being anticipated by Kauffman (U.S.

6,633,916 B2).

7.   **As to claim 1**, Kauffman teaches

-   means for partitioning hardware resources of the processor system between hardware

    resources that are used by the first operating system and hardware resources that are used

    by the second operating system (the inventive system logically divides the hardware into

    partition … allocation and sharing; col. 7, lines 22-26 and each partition then has an

    operating system instance running on it; col. 9, lines 2-3 and Partition 412 owns CPUs …

    and memory controller 450; col. 21, lines 14-17 and abstract),

-   means for storing the type of quantity of the partitioned hardware resources (The

    configuration tree … each component in the system to each partition; col. 9, lines 61-65

    and the configuration tree 300 … device configuration tables; col. 12, lines 4-7 and the

    tree has multiple node, each node describe the hardware configuration, the software

    configuration, and the minimum partition requirements; col. 10, lines 15-23 and col. 12,

    lines 24-32 and An operating system instance uses the information in the configuration

    tree to determine to which hardware resources it has access and reconfiguration control;

col. 19, line 67 – col. 19, line 2 and Each memory descriptor node ... among partition;

col. 17, lines 45-50),

- means for activating the second operating system by the hardware resources that have

  been reserved for use by the second operating system (Each HWRPB copy created ...

  into the HWRPB; col. 9, lines 31-36 and there must be anode with the same ... booting

  an operating system instance; col. 12, lines 35-37 and os_type, instance_name; col. 16,

  lines 50-62), and

- means for activating the first operating system by the hardware resources that have been

  reserved for use by the first operating system (Each HWRPB copy created ... into the

  HWRPB; col. 9, lines 31-36 and there must be anode with the same ... booting an

  operating system instance; col. 12, lines 35-37 and os_type, instance_name; col. 16, lines

  50-62),

- wherein the first operating system and the second operating system are able to operate

  simultaneously and independently (the hardware components ... instances 208, 210, 212;

  col. 7, lines 5-8 and Each operating system instance is capable of booting and running

  independently of all other operating system instances in the computer system; col. 7, lines

  31-38).

8.   **As to claim 2,** Kauffman teaches means for modifying the types and quantities of the

hardware resources that are to be partitioned before partitioning the hardware resources (The

configuration tree; col. 9, lines 61-65), and that is capable of modifying hardware resources that

are used at a time of system activation (resources can be reassigned from one partition to

another; col. 8, lines 10-14 and The configuration tree is then altered to transfer ownership of the resource to another operating system instance; col. 19, lines 3-13 Assignment of resources after joining; col. 28, lines 27-34).

9.   **As to claim 3**, Kauffman teaches means for reserving memory areas that can be shared by the first operating system and the second operating system (memory ... shared between partitions; col. 17, lines 45-50), wherein data exchanged between the first operating system and the second operating system can be performed by way of memory (An instance may need to be capable of using physical shared memory for communicating or sharing data with other instances; col. 22, lines 1-5).

10.   **As to claim 4**, see rejection of claim 3 above.

11.   **As to claim 5**, Kauffman teaches means for realizing communication in the first operating system and the second operating system using shared memory area (An instance may need to be capable of using physical shared memory for communicating or sharing data with other instances; col. 22, lines 1-5), the system in which the first operating system operates is used as an input/output processor of the system in which the second operating system operates (An instance may need ... hot inswap of memory; col. 21, lines 54-59 and Each instance may need ... to communicate with it; col. 22, lines 12-14).

12.   **As to claim 6**, see rejection of claim 5 above.

Conclusion

13.   The prior art made of record and not relied upon is considered pertinent to applicant's
disclosure.

-   Gulick et al (U.S. 6,314,501 B1) teaches "Computer system and method for operating
    multiple operating systems in different partitions of the computer system and for
    allowing the different partitions to communicate with one another through shared
    memory".

-   Bollella (U.S. 6,466,962 B2) teaches "System and method for supporting real-time
    computing within general purpose operating systems".

-   Arndt (U.S. 6,658,591 B1) teaches "Recovery from data fetch errors in hypervisor
    code".

-   Bouchier et al (U.S. 6,725,317 B1) teaches "System and method for managing a
    computer system having a plurality of partitions".

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Diem K Cao whose telephone number is (703) 305-5220. The
examiner can normally be reached on Monday - Thursday, 9:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Meng-Ai An can be reached on (703) 305-9678. The fax phone number for the
organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Diem Cao

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